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PATENT ABSTRACTS OF JAPAN

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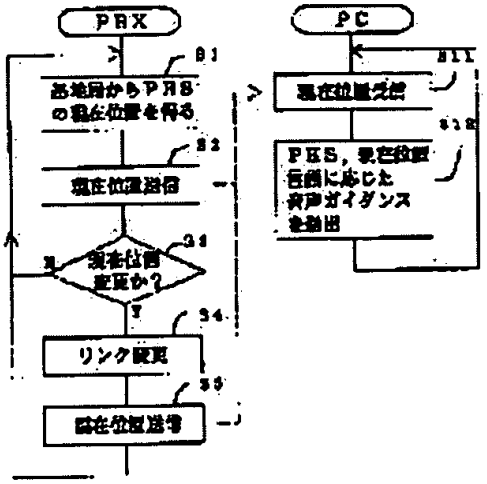
(54) VOICE GUIDANCE DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To simplify an operation without becoming noise to a user and to transmit individual different voice guidance to the plural users during movement.

SOLUTION: In the case that the present position information of a PHS (personal handy phone system) is changed, a LAN private branch exchange PBX forms a radio voice link between the PHS and a new radio base station and the link of a voice LAN packet between the new radio base station and a PC(personal computer), and informs the PC of the respective numbers of the PHS and the new radio base station. Once the respective numbers of the PHS and the new radio base station has been received, the PC reads the voice guidance corresponding to a present position and a set language and transmits it to the PHS through the new link of the voice LAN packet and the radio voice link.



LEGAL STATUS

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CLAIMS

[Claim(s)]
[Claim 1] Two or more base transceiver stations where a radio signal can be transmitted and received between the mobile radio terminals which each of two or more users who move carries, and each is connected to LAN, A storage means by which useful information will be beforehand memorized as voice guidance if it acquires when said user is in each area where said two or more base transceiver stations are arranged, Connect with said LAN and the positional information of said mobile radio terminal is acquired through said two or more base transceiver stations. Voice guide equipment which has a voice guidance transmission-control means to control said two or more base transceiver stations to transmit the voice guidance for every area memorized by said storage means based on said positional information to each of said mobile radio terminal through said base transceiver station.
[Claim 2] Two or more base transceiver stations where a radio signal can be transmitted and received between the mobile radio terminals which each of two or more users who move carries, and each is connected to LAN, If it acquires when said user is in each area where said two or more base transceiver stations are arranged, while having memorized useful information beforehand as voice guidance A storage means by which the information which shows the class of said voice guidance for said every mobile radio terminal is memorized beforehand, Connect with said LAN and the positional information of said mobile radio terminal is acquired through said two or more base transceiver stations. For every area memorized by said storage means based on the information which shows the class of said positional information and said voice guidance And voice guide equipment which has a voice guidance transmission-control means to control said two or more base transceiver stations to transmit said voice guidance of the class specified using the information which shows the class of said voice guidance to each of said mobile radio terminal through said base transceiver station.
[Claim 3] Voice guide equipment according to claim 2 whose information which said voice guidance is memorized in two or more language, and shows the class of said voice guidance is what shows the class of said language.
[Claim 4] Claim 1 said whose mobile radio terminal is a PHS terminal thru/or voice guide equipment of any one publication of three.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention relates to the voice guide equipment for transmitting useful information to a user by voice guidance in the current position especially to the user under migration about a data transmission unit.
[0002]
[Description of the Prior Art] When it is going to transmit information useful in the current position, i.e., explanation of an exhibit, notes, etc., to the user under migration as a use gestalt of this kind of voice guide equipment in service areas, such as a museum and an amusement park, the approach of a service area which fixes a loudspeaker and a head set to a location suitably, and broadcasts voice guidance can be considered.
[0003]
[Problem(s) to be Solved by the Invention] However, by the approach of arranging a loudspeaker and broadcasting voice guidance, there is a trouble that actuation is troublesome for the user under migration, by the calm **** **** use gestalt like an art gallery or a museum with the approach which there is a trouble of becoming the noise and fixes a head set.
[0004] Furthermore, by the approach of arranging one loudspeaker and head set in one area, there is a trouble that only one kind of voice guidance can be broadcast and the voice guidance from which each differs to two or more users cannot be broadcast, in one area. In addition, it is possible to transmit voice guidance of the same contents in English, German, and different language like Chinese, for example as a use gestalt which transmits the voice guidance from which each differs to two or more users.
[0005] This invention aims to let actuation offer easy voice guide equipment, without becoming the noise for a user in view of the above-mentioned trouble. This invention aims at offering the voice guide equipment which can transmit the voice guidance from which each differs to two or more users located in the same area again.
[0006]
[Means for Solving the Problem] In order to attain the above-mentioned purpose, in view of having established the link of a LAN packetized voice based on the current position of the LAN wireless terminal which is a mobile radio terminal in LAN, this invention makes a user carry a LAN radiotelephony terminal, and transmits voice guidance to a LAN radiotelephony terminal based on the current position. This invention transmits voice guidance of a predetermined class to a predetermined LAN wireless terminal again based on the information which shows the positional information of a LAN radiotelephony terminal, and the class of voice guidance.
[0007] Namely, two or more base transceiver stations where a radio signal can be transmitted and received between the mobile radio terminals which each of two or more users who move carries according to this invention, and each is connected to LAN, A storage means by which useful information will be beforehand memorized as voice guidance if it acquires when said user is in each area where said two or more base transceiver stations are arranged, Connect with said LAN and the

positional information of said mobile radio terminal is acquired through said two or more base transceiver stations. The voice guide equipment which has a voice guidance transmission-control means to control said two or more base transceiver stations to transmit the voice guidance for every area memorized by said storage means based on said positional information to each of said mobile radio terminal through said base transceiver station is offered.

[0008] Moreover, two or more base transceiver stations where a radio signal can be transmitted and received between the mobile radio terminals which each of two or more users who move carries according to this invention, and each is connected to LAN, If it acquires when said user is in each area where said two or more base transceiver stations are arranged, while having memorized useful information beforehand as voice guidance A storage means by which the information which shows the class of said voice guidance for said every mobile radio terminal is memorized beforehand, Connect with said LAN and the positional information of said mobile radio terminal is acquired through said two or more base transceiver stations. For every area memorized by said storage means based on the information which shows the class of said positional information and said voice guidance And the voice guide equipment which has a voice guidance transmission-control means to control said two or more base transceiver stations to transmit said voice guidance of the class specified using the information which shows the class of said voice guidance to each of said mobile radio terminal through said base transceiver station is offered.

[0009]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained with reference to a drawing. The explanatory view and drawing 4 which show the table of the class of the block diagram showing 1 operation gestalt of the voice guide equipment which drawing 1 requires for this invention, the explanatory view showing the voice guidance table on which drawing 2 is registered into the personal computer of drawing 1 , the positional information drawing 3 is remembered to be by the personal computer of drawing 1 , and voice guidance are a flow chart for explaining processing of the LAN private branch exchange of drawing 1 and a personal computer.

[0010] LAN1 shown in drawing 1 is the network which consisted of cables, such as 10BASE-T, and the sound signal on this LAN1 is transmitted by the packetized voice including sign sound signals, such as ADPCM. The LAN private branch exchange 17 which performs exchange control of the second generation cordless telephone terminal 12-1 as a mobile radio terminal called PHS (personal handicap phon system), 12-2, 12-3, the LAN-CS (cel site) main phone 11-1 that is base transceiver station equipment of 12-4, 11-2, 11-3, the sound-reinforcement terminal 23, a personal computer (PC)21, and LAN1 is connected to LAN1. Mass storage 18 like hard disk drive equipment and the character code-voice transducer 19 are connected to PC21.

[0011] Here, when installing it in the service area of a museum, using this voice guide equipment as an example, the LAN-CS main phone 11-1 is arranged in the display area A, the LAN-CS main phone 11-2 is arranged in the display area B, and the LAN-CS main phone 11-3 and the sound-reinforcement terminal 23 are arranged in Area (Robbie Deguchi) C. Moreover, the character code of the voice guidance data of English, German, and Chinese is beforehand memorized for every area A-C by the storage 18 connected to PC21. In addition, the loudspeaker of the telephone terminal 12-1 to 12-4 has not a hand set but desirable earphone and head set.

[0012] The address of the voice guidance data for every every area A-C memorized by storage 18 as shown in the memory in PC21 at drawing 2 , English, German, and Chinese is memorized by every base transceiver station (LAN-CS main phone 11-1 to 11-3). This voice guidance data is read by control of PC21 at the time of a guide, and is changed into an analog sound signal by the character code-voice transducer 19.

[0013] Moreover, in case the memory of PC21 has the area for memorizing currency information (number of the LAN-CS main phone 11-1 to 11-3 which is a base transceiver station), and setting language every mobile radio terminal (PHS) 12-1 to 12-4 as shown in drawing 3 , and PHS 12-1 to 12-4 is lent to a user, the language of a request of a user is set as this area every PHS 12-1 to 12-4.

[0014] In such a configuration, while a wireless voice link is formed between PHS 12-1 to 12-4, and a

base transceiver station (LAN-CS main phone 11-1 to 11-3) If the link of a voice LAN packet is formed between a base transceiver station 11-1 to 11-3, and PC21 It becomes ready-for-sending ability from PC21 about a sound signal to PHS 12-1 to 12-4. Moreover, the number of a base transceiver station 11-1 to 11-3 is transmitted [for every predetermined time] to the LAN private branch exchange 17 as the present positional information of PHS 12-1 to 12-4 from a base transceiver station 11-1 to 11-3.
[0015] As the LAN private branch exchange 17 is shown in drawing 4 , the positional information is notified to PC21 that the present positional information of PHS12 is received through a base transceiver station 11-1 to 11-3 combining the number of PHS12, and the number of a base transceiver station 11 (step S2). (step S1) Next, it judges whether the location shown by this positional information differs from the current position of PHS12 memorized until now (step S3). When the current position is not changing, to step S1 return, another side, and when changing While updating the current position memorized to the new current position, the wireless voice link between the PHS12 and new base transceiver station 11, While controlling to form the link of the voice LAN packet between new base transceiver stations 11 and PCs21 (step S4), each number of the PHS12 and the new base transceiver station 11 is notified to PC21 (step S5). The dotted line shows the notice of steps S2 and S5 performed through LAN1 among drawing 4 .
[0016] If each number of this PHS12 and the new base transceiver station 11 is received (step S11), after PC21 will update the number of the base transceiver station 11 which is the current position of that PHS12 memorized as shown in drawing 3 , it reads the voice guidance according to the number of that PHS12, the number of the current position, and setting language, and transmits it to that PHS12 through the link and the wireless voice link of a new voice LAN packet (step S12).
[0017] If according to such a configuration PHS 12-1 moves to the area A of a base transceiver station 11-1 when "German" is set up, for example to PHS12, based on the number of PHS 12-1, the number of the base transceiver station 11-1 which is the current position, and setting language, "voice guidance of the German in Area A" will be transmitted from PC21 to PHS 12-1. in addition, the case where PHS 12-1 moves to Robbie Deguchi C who is the area of a base transceiver station 11-3 -- PC21 to the base transceiver station 11-3 -- minding -- PHS 12-1 -- receiving -- coming out -- there is nothing and "voice guidance of the German of the purport for which a visit is appreciated" can also be transmitted to the sound-reinforcement terminal 23.
[0018]
[Effect of the Invention] Voice guide equipment with easy actuation can be realized without becoming the noise, since according to this invention a user is made to carry the LAN wireless terminal as a mobile radio terminal and voice guidance was transmitted to the LAN wireless terminal using the current position, as explained above. Since this invention transmitted voice guidance to the LAN wireless terminal based on the positional information of a LAN radiotelephony terminal, and the class of voice guidance, it can transmit the voice guidance from which each differs to two or more users located in the same area again.

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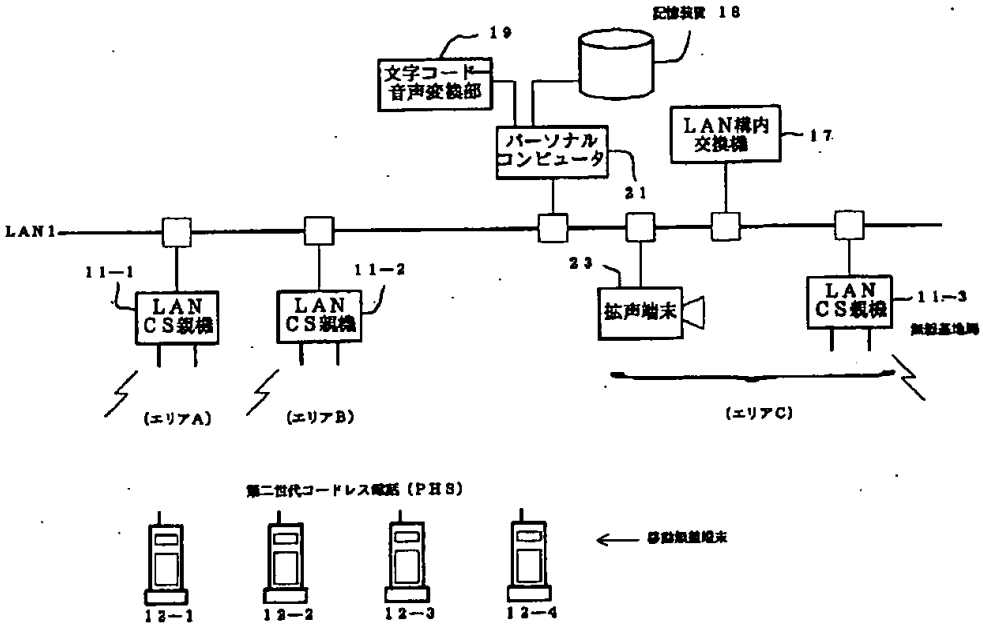
DRAWINGS

[Drawing 1]



[Drawing 2]

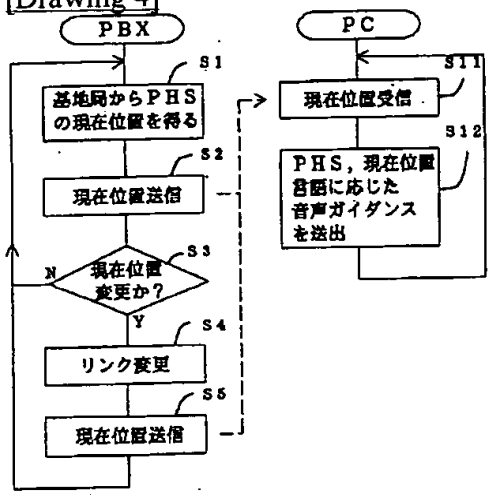
アドレス

基地局1	エリアAの英語ガイダンス
	エリアAのドイツ語ガイダンス
	エリアAの中国語ガイダンス
基地局2	エリアBの英語ガイダンス
	エリアBのドイツ語ガイダンス
	エリアBの 中国語ガイダンス
基地局3	エリアCの英語ガイダンス
	エリアCのドイツ語ガイダンス
	エリアCの中国語ガイダンス

[Drawing 3]

	現在位置	種類
PHS1	基地局 1	英語
PHS2	基地局 1	ドイツ語
PHS3	基地局 3	中国語

[Drawing 4]



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